

B.TECH DEGREE EXAMINATIONS: NOV/DEC 2014

(Regulation 2009)

Seventh Semester

INFORMATION TECHNOLOGY

ITY118: AD HOC & Sensor Networks

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The two mandatory modulation techniques used for data link (DL) in HIPERACCESS are _____ and _____.
 - a) QPSK, 16-QAM
 - b) QPSK, 64-QAM
 - c) 16-QAM, 64-QAM
 - d) 8-QAM, QPSK
2. One of the issues in designing a MAC protocol is _____.
 - a) QoS support
 - b) Resource constraint
 - c) Robustness
 - d) Dynamic topology
3. _____, an on-demand routing protocol limits the control packets to a small region during the reconfiguration process.
 - a) DSR
 - b) AODV
 - c) TORA
 - d) LAR
4. The multicast routing protocol specified below that uses mesh topology is _____.
 - a) MAODV
 - b) ABAM
 - c) MCEDAR
 - d) ODMRP
5. Among the attacks mentioned below, the SEAD routing protocol overcomes _____.
 - a) Resource consumption attack
 - b) Jamming attack
 - c) Impersonation attack
 - d) Repudiation attack
6. In the protocol stack, the attack belonging to multi-layer is
 - a) Wormhole attack
 - b) Blackhole attack
 - c) DoS attack
 - d) Byzantine attack
7. The scheduling scheme used to improve battery life is _____.

(ii) Illustrate the key differences between the LAR1 and LAR2 algorithms. (6)

(OR)

b) (i) Discuss some of the important routing metrics considered in power-aware routing protocols. (6)

(ii) With suitable example, illustrate any one of the mesh-based multicast routing protocols. (8)

23. a) Classify the network security attacks and expand each layer-wise attack in detail.

(OR)

b) Elaborate any two secure routing protocols in Ad hoc wireless networks.

24. a) Write about the significant features of various schemes in battery management with suitable example.

(OR)

b) Elucidate on different system power management schemes.

25. a) Model the traffic with various data dissemination architectures and protocols.

(OR)

b) Why is location discovery necessary in Wireless Sensor Networks and discuss some of the localization algorithms needed for the same.
